

Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table border="1"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="background-color: #FFCCCC;">Fire Hazard</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	0	Reactivity	0	
Health Hazard	2							
Fire Hazard	0							
Reactivity	0							
		See Section 15.						

Section 1. Chemical Product and Company Identification		Page Number: 1
Common Name/ Trade Name	Methylene bromide	Catalog Number(s). M2259
		CAS# 74-95-3
Manufacturer	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	RTECS PA7350000
Commercial Name(s)	Not available.	TSCA TSCA 8(b) inventory: Methylene bromide
Synonym	Dibromomethane	CI# Not applicable.
Chemical Name	Methylene bromide	IN CASE OF EMERGENCY CHEMTREC (24hr) 800-424-9300 CALL (310) 516-8000
Chemical Family	Aliphatic halogenated compound. (Aliphatic.)	
Chemical Formula	CH ₂ Br ₂	
Supplier	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

Section 2. Composition and Information on Ingredients					
		<i>Exposure Limits</i>			
Name	CAS #	TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	% by Weight
1) Methylene bromide	74-95-3				100
Toxicological Data on Ingredients	Methylene bromide: ORAL (LD50): Acute: 108 mg/kg [Rat]. 1000 mg/kg [Rabbit]. DERMAL (LD50): Acute: >4000 mg/kg [Rabbit]. VAPOR (LC50): Acute: 3977.9 ppm 4 hour(s) [Rat].				

Section 3. Hazards Identification	
Potential Acute Health Effects	Hazardous in case of eye contact (irritant). Slightly hazardous in case of skin contact (irritant). Severe over-exposure can result in death.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for mammals. Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to blood, lungs, the nervous system, digestive system, gastrointestinal tract. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

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Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.
Skin Contact	After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention.
Serious Skin Contact	Not available.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Serious Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.
Ingestion	Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	Non-flammable.
Auto-Ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Not applicable.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Large Spill	Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Section 7. Handling and Storage

Precautions	Keep locked up. Do not ingest. Do not breathe gas/fumes/ vapour/spray. Avoid contact with eyes. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.
Storage	Keep container tightly closed. Keep in a cool, well-ventilated place. Highly toxic or infectious materials should be stored in a separate locked safety storage cabinet or room.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.	Odor	Not available.
Molecular Weight	173.85 g/mole	Taste	Not available.
pH (1% soln/water)	Not applicable.	Color	Colorless.
Boiling Point	96.95°C (206.5°F)		
Melting Point	-52.5°C (-62.5°F)		
Critical Temperature	310°C (590°F)		
Specific Gravity	2.497 (Water = 1)		
Vapor Pressure	40 mm of Hg (@ 20°C)		
Vapor Density	6.05 (Air = 1)		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water, methanol, diethyl ether, acetone.		
Solubility	Partially soluble in methanol, diethyl ether, acetone. Insoluble in cold water, hot water.		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Not available.
Incompatibility with various substances	Slightly reactive to reactive with metals.
Corrosivity	Not available.

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Special Remarks on Reactivity Not available.

Special Remarks on Corrosivity Not available.

Polymerization Not available.

Section 11. Toxicological Information

Routes of Entry Absorbed through skin. Eye contact. Ingestion.

Toxicity to Animals **WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.**
Acute oral toxicity (LD50): 108 mg/kg [Rat].
Acute dermal toxicity (LD50): >4000 mg/kg [Rabbit].
Acute toxicity of the vapor (LC50): 3977.9 ppm 4 hour(s) [Rat].

Chronic Effects on Humans **MUTAGENIC EFFECTS:** Mutagenic for mammals. Mutagenic for bacteria and/or yeast.
The substance is toxic to blood, lungs, the nervous system, digestive system, gastrointestinal tract.

Other Toxic Effects on Humans Slightly hazardous in case of skin contact (irritant).

Special Remarks on Toxicity to Animals Not available.

Special Remarks on Chronic Effects on Humans Not available.

Special Remarks on other Toxic Effects on Humans Not available.

Section 12. Ecological Information

Ecotoxicity Not available.

BOD5 and COD Not available.

Products of Biodegradation Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation The products of degradation are as toxic as the product itself.

Special Remarks on the Products of Biodegradation Not available.

Section 13. Disposal Considerations

Waste Disposal

Section 14. Transport Information

DOT Classification CLASS 6.1: Poisonous material.

Identification : Dibromomethane : UN2664 PG: III

Special Provisions for Transport Not available.

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DOT (Pictograms)



Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations

Pennsylvania RTK: Methylene bromide
 Massachusetts RTK: Methylene bromide
 New Jersey: Methylene bromide
 TSCA 8(b) inventory: Methylene bromide
 TSCA 8(a) IUR: Methylene bromide
 TSCA 12(b) annual export notification: Methylene bromide
 SARA 313 toxic chemical notification and release reporting: Methylene bromide
 CERCLA: Hazardous substances.: Methylene bromide: 1000 lbs. (453.6 kg)

California Proposition 65 Warnings

Other Regulations

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications

WHMIS (Canada) CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).
 CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC) R36- Irritating to eyes.
 R48/25- Toxic: danger of serious damage to health in case of prolonged exposure if swallowed.

HMIS (U.S.A.)

Health Hazard	2
Fire Hazard	0
Reactivity	0
Personal Protection	h

National Fire Protection Association (U.S.A.)

Health  Flammability
 Reactivity
 Specific hazard

WHMIS (Canada) (Pictograms)



DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)



ADR (Europe) (Pictograms)



Protective Equipment



Gloves.



Lab coat.



Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Splash goggles.

Section 16. Other Information

MSDS Code 4017D

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 8/11/2006.

Verified by Sonia Owen.

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CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.